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**Patent Number:**

FR2804173 A1

20010727

**System for ensuring the optimum regeneration of particulates in the filter present in the exhaust system of a Diesel automotive engine**

(FR2804173)

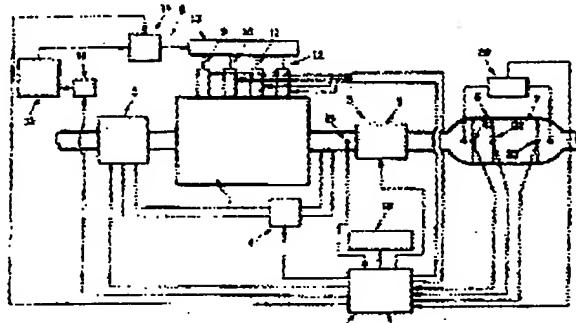
**SYSYSTE D'AIDE A LA  
REGENERATION D'UN FILTRE A  
PARTICULES INTEGRE DANS UNE  
LIGNE D'ECHAPPEMENT D'UN  
MOTEUR DIESEL DE VEHICULE  
AUTOMOBILE**

**Index Terms:**

INTERNAL  
COMBUSTION  
ENGINE; DIESEL  
ENGINE; EXHAUST  
PIPE; PARTICLE  
FILTER;  
REGENERATION;  
ADDITIONAL  
INJECTION; EXHAUST  
GAS RECIRCULATION;  
TURBOCOMPRESSOR;  
OXIDATION  
CATALYST; ADDITIVE;  
COMMON RAIL;  
ELECTROMAGNETIC  
INJECTOR; SENSOR;  
TEMPERATURE;  
DIFFERENTIAL  
PRESSURE; FILTER  
STATE; CONTROL;  
OXYGEN SENSOR;  
COORDINATION  
TABLE

(FR2804173)

The engine (1) has different organs associated with it, and has a unit (17) for controlling its function, adapted for triggering a phase of regeneration of the particulate filter. The control unit has a unit (18) for estimating the amount of particles to be filtered, connected to a lambda probe proportionally (24) delivering information relative to the oxygen concentration of the exhaust gas. There is a unit (19) for storing a correspondence table containing, as a function of the exhaust gas oxygen content and for each functioning point of the engine, an estimated quantity of particles emitted by the engine, and having members for adding in the quantities, also estimated during the functioning of the engine for determining the particulate load of the filter.



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Patent of invention  
(2nd publication)

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Patent Number: DE19741973 C1 19990422

**Method of determining the soot conc. of self-igniting internal combustion engines**  
(DE19741973)

**Verfahren zur Bestimmung der Ru konzentration von selbstzündenden Brennkraftmaschinen**

(DE19741973)

the method involves deriving the soot conc. using a neural network (202) which is trained using input data (201) characteristic of the soot conc. (203) with associated signals representing the soot conc. Finally, the soot conc. is derived from acquired input data using the trained neural network

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**FamPat family**

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